REMARKS/ARGUMENTS

In The Claims:

Claims 1–22 are pending in the application.

Claims 1-3, 7-8, 10-11, and 13-19 have been amended.

Claims 6, 9, 12, and 20-22 have been canceled without prejudice.

No new claims have been added.

Claims 1-5, 7-8, 10-11, and 13-19 remain in the application.

Applicant asserts that the amended claims are supported by the specification and contain no new subject matter. Furthermore, Applicant reserves the right to pursue in one or more future applications any of the subject matter canceled herein.

Response to Claim Objections

Claims 13 and 22 have been objected to by the Examiner, because of informalities. The Examiner's objections are overcome by amending claim 13 and canceling claim 22.

Rejection under 35 U.S.C. §102(b)

The rejection of claim 1-7 and 13-18 under 35 U.S.C. §102(b) as being anticipated by Nakai is hereby traversed and reconsideration thereof is respectfully requested in view of remarks set forth below.

The subject matter of original claim 12, which depends from original claim 9, has been incorporated into amended claim 1. Applicant believes the subject matter of original claim 12 to be patentable over the cited reference.

The subject matter of original claim 21, which depends from original claim 20, has been incorporated into amended claim 13. Applicant believes the subject matter of original claim 21 to be patentable over the cited reference.

Applicant respectfully requests withdrawal of this rejection.

Rejection under 35 U.S.C. §103(a)

The rejection of claims 9-12 and 20-21 under 35 U.S.C. §103(a) as being unpatentable over Nakai in view of Hershey is hereby traversed and reconsideration thereof is respectfully requested in view of remarks set forth below.

Claim 1 includes the subject matter of claims 9 and 12. Claim 13 includes the subject matter claims 20 and 21.

The office action admits that Nakai fails to disclose a stand-by processor domain, as recited in original claim 9. Hershey discloses as prior art redundant systems with a standby processor to take the place of a primary processor when the primary fails. The standby monitors a heartbeat signal from the primary, to periodically check the health of the primary. If the standby senses that the primary is failing, the standby will switchover to perform the functions of the primary, generating the output that had been generated by the primary. The control of the switchover can be initiated by the standby signaling the primary to stop, while the standby takes over the primary's functions. Hershey does not disclose or suggest an active time indicator associated with the active message for each of the active processes, as recited in amended claims 1 and 13. Therefore, Hershey fails to provide the ability to isolate which process or processes in the processor domain has faulted.

While Hershey discloses switching based on a heartbeat signal, Hershey does not disclose generating a statistical characteristic for the modified active message, and based on the statistical characteristic, interchanging the stand-by processor domain with

the active processor domain, as recited in amended claim 1. As asserted in the office action with respect to claim 6, Nakai calculates from the time stamps of the messages so far received, which have not been determined as being in error, an average value of the time stamps as a predetermined time interval. This predetermined time interval, or if necessary, an allowable range is set by taking an error in the data source into account, and it is checked whether the time interval of the time stamp of the received message is within the allowable range or not. If the time interval is not within the allowable range, the processor determines that the processor which includes the data source was in error and set an error flag in the received message. (col. 6, line 42-58).

Nakai fails to disclose the stand-by processor domain recited in amended claim 1 and 13. Hershey fails to teach or suggest using a statistical characteristic for switching between processors. The Nakai and Hershey references, taken either alone or in combination, do not disclose, teach or suggest <u>interchanging</u> the stand-by processor domain with the active processor domain <u>based on the statistical characteristic</u>, as recited in claim 1 or, for the same reasons, in claim 13.

Baker discloses statistical methods for fault detection and fault identification, but fails to teach or suggest applying fault detection to interchanging processor domains.

Withdrawal of the rejection of claims 1 and 13 under 35 U.S.C. §103(a) as being unpatentable over Nakai in view of Hershey or Baker is therefore respectfully requested.

Dependent Claims 2-5, 7-8, 10-11, and 14-19 Are Patentable Over the Cited References

As shown by the arguments and remarks put forth above, each of the claims 1 and 13 is patentable over the references cited by the Examiner. As claims 2-5, 7-8, 10-11, and 14-19 variously depend from claims 1 and 13 and recite further limitations thereon, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of the dependent claims and pass them to allowance.

CONCLUSION

In view of the above remarks, Applicant submits that claims 1-5, 7-8, 10-11, and 13-19 are in condition for allowance, and requests that the Examiner pass this application to allowance.

If the Examiner believes that a telephone conversation with Applicant's attorney would expedite allowance of this application, the Examiner is invited to call the undersigned.

Dated: November 3, 2004   Respectfully submitted by,

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NOTE: It is believed that fees due in connection with this submission have been appropriately provided for. However, if an additional fee amount is due, please charge Deposit Account No. 18-1945, under Order No. CDPC-P01-004, from which the undersigned is authorized to withdraw.